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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/769,275	01/26/2001	Thomas Thoroë Scherb	P20416	4360

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EXAMINER

HALPERN, MARK

ART UNIT

PAPER NUMBER

1731

17

DATE MAILED: 12/10/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/769,275	SCHERB ET AL.
	Examiner Mark Halpern	Art Unit 1731

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

THE MAILING DATE OF THIS COMMUNICATION

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 02 December 2002 .

2a) This action is **FINAL**. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-5,7-27 and 29-70 is/are pending in the application.

4a) Of the above claim(s) 48-67 and 70 is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1-5,7-27,29-47,68 and 69 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) The proposed drawing correction filed on _____ is: a) approved b) disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.

12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) The translation of the foreign language provisional application has been received.

15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) Paper No(s). _____ .
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) Notice of Informal Patent Application (PTO-152)
3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ . 6) Other: _____ .

DETAILED ACTION

- 1) Acknowledgement is made of RCE received 12/2/2002, Paper No. 16.

Amendment received 10/30/2002, Paper No. 13, is under consideration. Applicants amend claims 1, 22, 68, and cancel claims 6 and 28.

Information Disclosure Statement

- 2) The information disclosure statement filed 11/14/2002, fails to comply with 37 CFR 1.98(a)(1), which requires a list of all patents, publications, or other information submitted for consideration by the Office. It has been placed in the application file, but the information referred to therein has not been considered.

The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609 A(1) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3) Claims 1-5, 7-12, 16, are rejected under 35 U.S.C. 102(b) as being anticipated by Kamps (WO 96/35018).

Claims 1, 3-5, 8-12, 16: Kamps discloses an apparatus for producing a tissue paper web. The apparatus has an inner continuous dewatering belt 12 and an outer continuous dewatering belt 13; said belts are converging and are guided over a forming roll 15. A material feed device, a headbox 11, feeds a paper making stock suspension into a gap between the belts forming a fiber tissue web. Kamps discloses a suction element 30, which is a vacuum suction box (pg. 9, line 15), located adjacent and inside the inner belt on a side which is opposite the outer belt, said suction element being adjacent the area of separation of the belts. The belts separate immediately following the forming roll 15, with the web following the inner belt 12 over a pressure roll 41, which then enters a nip formed by roll 41 and a drying roll drum 40. The web then adheres to heated drying drum, which is equipped with a drying hood (pg. 9, line 27 to pg. 10, line 5, and Figure 5). As shown in the Kamps Figure 5, the outer belt 13 does not come in contact with the forming roll.

Claims 2, 7: the dewatering wires of Kamps are of variable permeability (pg. 7, lines 21-36).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4) Claims 13-15, 17-21, are rejected under 35 U.S.C. 103(a) as being obvious over Kamps in view of Erikson (WO 94/28242).

Claims 13-15, 17-21; Kamps is applied as above for claim 1, Kamps does not disclose a suction element of adjustable vacuum. Erikson discloses a suction hydrofoil 7, located in the area of separation, of adjustable vacuum (Erikson, Abstract, pgs. 6-8, and Figure 1). It would have been obvious to combine the teachings of Erikson and Kamps, because such a combination would assure a more effective means of dewatering the web for web transfer onto the inner belt in the design of Kamps. The suction forming roll of Erikson is positioned in front of the separation point in a web travel direction. The Erikson suction box 23 forces are used in conjunction with the suction forming roll depending on the process conditions and the product being formed.

5) Claims 22-27, 29-47, 68, are rejected under 35 U.S.C. 103(a) as being obvious over Kamps in view of Erikson and further in view Kanitz (6,231,723).

Claims 22: Kamps discloses an apparatus for producing a tissue paper web. The apparatus has an inner continuous dewatering belt 12 and an outer continuous dewatering belt 13; said belts are converging and are guided over a forming roll 15. A material feed device, a headbox 11, feeds a paper making stock suspension into a gap between the belts forming a fiber tissue web. Kamps discloses a suction element 30, which is a vacuum suction box (pg. 9, line 15), located adjacent and inside the inner belt on a side which is opposite the outer belt, said suction element being adjacent the area

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of separation of the belts. The belts separate immediately following the forming roll 15, with the web following the inner belt 12 over a pressure roll 41, which then enters a nip formed by roll 41 and a drying roll drum 40. The web then adheres to heated drying drum, which is equipped with a drying hood (pg. 9, line 27 to pg. 10, line 5, and Figure 5). As shown in the Kamps Figure 5, the outer belt 13 does not come in contact with the forming roll. Kamps in view of Erikson does not disclose a conditioning device positioned adjacent the outer belt. Kanitz discloses a conditioning device 74, which is a water shower, positioned adjacent to an outer belt 28 (Kanitz, col. 3, line 10 to col. 4, line 49, and Figure 1). It would have been obvious to combine the teachings of Kanitz and Kamps in view of Erikson, because such a combination would provide improved maintenance on the forming belt in the Kamps design.

Claims 23, 29, 68; Kamps discloses wires of variable permeability.

Claim 24; Kamps discloses a suction element adjacent the inner belt.

Claims 25-27; Kamps discloses tissue separation from the outer belt and adhering to the inner belt, said belts being continuous belts.

Claim 30; Kamps discloses that the outer belt does not come in contact with the forming roll.

Claims 31-32, 36; Erikson discloses a suction forming roll, said roll comprises a suction zone.

Claims 33-35, 37-43; Erikson discloses suction box 23 in area adjacent to the separation point; said box is inside an inner belt loop. Vacuum is adjusted when the box is used in conjunction with the suction forming roll. Erikson discloses hydrofoil 7.

Claim 47; Kamps discloses a crescent former (Kamps, pg. 9, line 29).

6) Claim 69 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kamps in view of Erikson, and further in view of Kanitz as applied to claim 68 above, and further in view of Tietz (DE 197 56 422). Kamps in view of Erikson and further in view of Kanitz disclose the invention except for the nip being formed between a cylinder and a shoe press roll. Tietz discloses the web being guided over an inner belt 5 to a nip 4 between a drying cylinder 3 and a shoe press roll 2, after which the web is removed from the inner belt 5 (Tietz, col. 4, lines 19-68, and Figure). It would have been obvious to combine the teachings of Tietz with the teachings of Kamps, Erikson and Kanitz, into the design of Kamps, because such a combination would provide an economic means of removing moisture from the web prior to drying.

7) Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Odell (5,536,372). Odell discloses a twin wire former for a paper machine. The apparatus has an inner continuous dewatering belt 10 and an outer continuous dewatering belt 20; said belts are converging and to form a stock inlet nip. A paper making stock suspension J is fed from a former into a gap between the belts forming a fiber web W. The belts separate immediately following the forming roll 15a, with the web following the inner belt 10. Suction flat boxes 85a and 85b are positioned adjacent the inner belt on a side opposite the outer belt. Said suction flat boxes 85a and 85b are located adjacent the forming rolls 15a and 22a (col. 11, line 64 to col. 12, line 5 and Figure 5).

Response to Amendment

- 8) The Restriction has been made FINAL, as per Advisory Action of 11/14/2002, Paper No. 14.
- 9) Claim 1 rejection under 35 U.S.C. 102(e) as being anticipated by Tietz (6,235,160), is withdrawn.
- 10) Claim 69 rejection under 35 U.S.C. 103(a) as being unpatentable over Kamps in view of Erikson, and further in view of Kanitz as applied to claim 68 above, and further in view of Tietz (6,235,160), is withdrawn.
- 11) Applicant's arguments filed 10/30/2002, have been fully considered but they are not persuasive.

In regard to amended claim 1, Applicants allege the cited prior art, Kamps, does not disclose a forming roll. Applicants allege that examiner bases the rejection on combination of Figures 4 and 5.

Examiner responds that Kamps clearly discloses a forming roll; see pg. 9, line 34, and Figure 5. Figure 4 has not been in consideration by the examiner.

In regard to amended claim 1, Applicants allege that the cited prior art, Kamps, teaches that the suction device 30 is not positioned *at least one of: within the forming roll, and adjacent the area of the separation point.*

Examiner responds as follows. Kamps, as shown in Figure 5, teaches that the suction device 30 is positioned adjacent the area of the separation of belts 11 and 13. In view that the claim or the Specification does not define the concept of what is meant by "adjacent", nor a specific distance is given as to how far the suction device should be

to be considered "adjacent", the Office interprets the location of the suction device of Kamps as being adjacent the area of separation.

In regard to amended claim 1, Applicants allege that the cited prior art, Odell, teaches that the suction devices 85a and 85b are not positioned *at least one of: within the forming roll, and adjacent the area of the separation point.*

Examiner responds as follows. Odell teaches that the suction devices 85a and 85b are positioned adjacent the area of the separation of belts 10 and 20. In view that the claim or the Specification does not define the concept of what is meant by "adjacent", nor a specific distance is given as to how far the suction device should be to be considered "adjacent", the Office interprets the location of the suction devices of Odell as being adjacent the area of separation.

Applicants state on page 20, that present Figure 2 provides one example of what is meant by the term "adjacent", where the suction element 36 is located immediately following the forming roll 18.

Examiner responds that the example of shown in present Figure 2 was considered.

Conclusion

- 12) Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark Halpern whose telephone number is 703-305-4522. The examiner can normally be reached on Mon-Fri, (9:00-5:30).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on 703-308-1164. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7718 for regular communications and 703-305-3599 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone no. is 703-308-0651.

M. Halpern

Mark Halpern
Patent Examiner
Art Unit 1731

December 7, 2002